

# HIGHWAYS & TRANSPORT TRAFFIC & NETWORK MANAGEMENT

Studley, Calne Without

20mph Speed Restriction Assessment

## **Document Control Sheet**

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## 1.0 Introduction and background

Following the publication of Wiltshire Council's policy for 20mph speed limits, the authority made a commitment to undertake assessments to determine the feasibility of 20mph speed restrictions where requests are made, supported and funded by Local Highway and Footway Improvement Groups.

Calne Local Highway and Footway Improvement Group requested that Studley, Calne Without be subject to an assessment to determine the feasibility of a 20mph speed restriction.

This report assesses the feasibility when considered in respect of the guidance contained in the following documents:

- i) "Wiltshire Policy on 20mph Speed Limits and Zones"; and,
- ii) The Department for Transport (DfT) Circular 01/2013 "Setting Local Speed Limits".

## 2.0 Data Collection

Average speed and volume of traffic were recorded at locations in the village using automatic traffic counters. Portable automatic traffic counters were installed at the locations shown on the plan in **Appendix A** and operated from 12 June to 18 June 2024.

The Studley Gardens development north of the A4 and accessed off Studley Lane was not included in this assessment as it is not adopted highway.

The data from each survey location has been used to identify free flow traffic speeds. Table 1 summarises the data with the survey locations shown on the plan in **Appendix A**. The full survey data can be made available upon request.

Location Number	Location Name	Total Traffic Volume (7 day annual average daily traffic)	85 <sup>th</sup> %ile Speed (mph)	Mean Average Speed (mph)
ATC 1	Studley Road	523	29.9	24.5
ATC 2	Studley Hill	236	27.5	23.1
ATC 3	Road leading from Norley Lane north-east towards Old Railway Line	126	16.2	13.3
ATC 4	Norley Lane	97	21.6	17.6
ATC 5	Norley Lane	227	21.6	17.8

Table 1 - Summary of survey results

## 3.0 Collision Data

An investigation into the Police Collision Database shows there have not been any recorded Personal Injury Collisions (PICs) in Studley, Calne Without in the 3-year period preceding this report.

## 4.0 Analysis against Wiltshire Council Policy

It is important to remember that all speed limits should be set where it can be expected that overall compliance with the limit can be realistically achieved. There is no expectation that higher speeds can be reduced merely through the provision of signs; it is likely that hard engineering measures would be necessary, such as alteration to the road layout and/or road humps.

There are two different types of 20mph speed restriction – a 20mph Zone and a 20mph Speed Limit.

Wiltshire Council policy has taken into account the experience gained from previous studies into 20mph speed limits and zones, as well as the guidance from DfT Circular 01/2013. The Wiltshire policy identifies options to consider when implementing 20mph zones and limits within the county:

#### 20mph Zones:

20mph zones are defined as areas subject to a 20mph speed restriction which cover a number of roads and is supported by the appropriate traffic order and signs.

Typically there will be traffic calming measures at regular intervals throughout the zone to ensure that speeds remain reasonably consistent in the area. These could include the introduction of road humps and raised junctions, as well as build outs, chicanes and pinch points.

#### 20mph zones to be considered where:

- Roads are already restricted to a 30mph speed limit.
- A proven history of road user conflict with vulnerable users such as child pedestrians is apparent.
- New residential developments have been introduced.
- There is an alternative existing route, enabling drivers to avoid the zone.
- On major streets, there are significant numbers of pedestrian or bicycle journeys that are considered to outweigh the disadvantage of longer journeys for motorists.

#### 20mph Speed Limits:

20mph limits are defined as streets where the speed restriction has been reduced to 20mph but where there are no physical calming measures. Drivers are alerted to the restriction by the use of terminal and repeater signs only.

#### 20mph Speed Limits to be considered where:

- Mean 'before' speeds are at or below 24mph (if they are just above this threshold lighter touch engineering measures to reduce speed may be implemented)
- Roads do not have a strategic function or where motor vehicle movement is not the primary function.
- On major streets there are significant numbers of pedestrian or bicycle journeys that are considered to outweigh the disadvantage of longer journeys for motorists.
- In rural areas the location, in addition to the above conditions, meets the definition of a village as set out in Traffic Advisory Leaflet "01/04 Village Speed Limits".

#### 5.0 Conclusion / Recommendation

Results have shown that mean average traffic speeds at all five locations are at or below the threshold guidance of 24mph. Additional soft touch engineering measures such as additional carriageway roundels can be considered where the mean speeds are close to or higher than the threshold, if this assessment is pursued to implementation.

There is no doubt that the carriageway width and alignment are the main speed controlling factors on many of these roads.

Whilst 20mph seems appropriate only a modest reduction in speed is likely to be achieved. It is recommended that the local community is consulted as to whether they are supportive of the signing and road markings associated with the implementation of a 20mph speed limit.

Taking into consideration the points raised above, the implementation of a 20mph speed limit is achievable, if locally, all parties are supportive, and it is agreed the benefits of introducing a 20mph speed limit outweigh the costs of implementation and impact to the environment at this site.

The proposal plan includes a 20mph carriageway roundel to be provided at each entry point to the 20mph speed limit at Studley, Calne Without along with two additional pairs of carriageway roundels along Studley Lane to reinforce the speed limit.

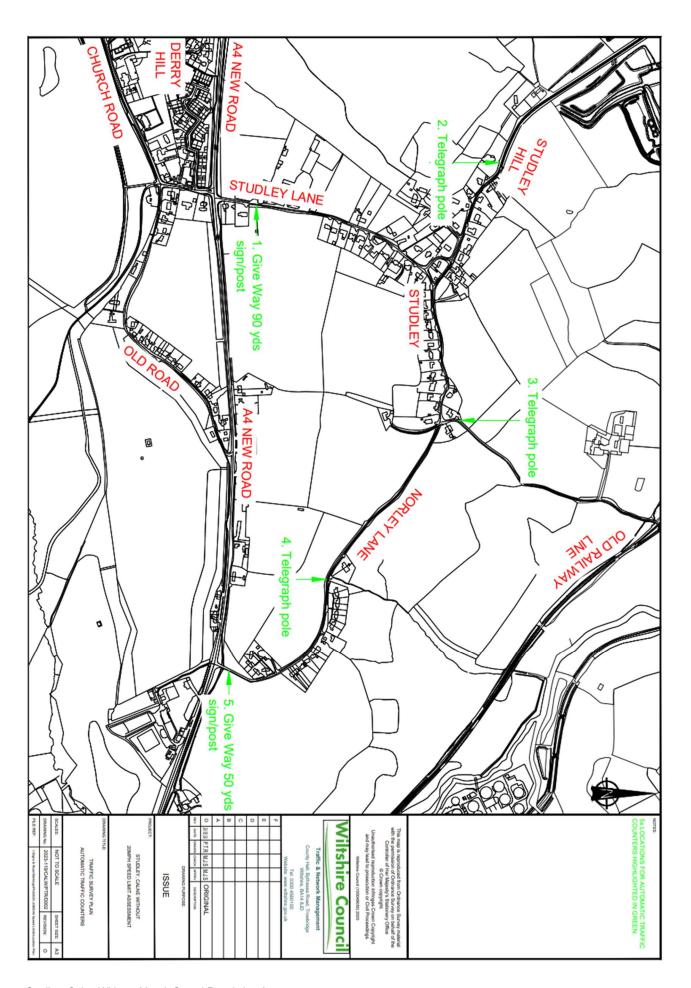
Please refer to **Appendix B** for the proposal plan.

## 6.0 Cost Estimate

The estimated costs of this scheme are set out in the table below.

Item	Approximate costs
Signing	£3,500
Road markings	£1,000
Temporary Traffic Management	£1,500
Legal costs	£3,000
Total Costs	£9,000

## 7.0 Appendix A – Traffic Survey Plan



# 8.0 Appendix B - Preliminary Design Plan

